**Terms of Reference**

**for the purchase of a TSL 4000/6.3/0.4 dry-type transformer**

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| Item № | Requirement parameters for the Goods to be purchased | Specific requirements for the Goods to be purchased |
| 1 | Name/type/quantity/volumes/measure unit | * Dry-type power transformer, step-down, 4,000 kVA, 6.3/0.4 kV, 50 Hz: 1 unit. |
| 2 | Requirements for the Goods to be supplied | * Designed for installation at the altitude of 4,010 m, copper winding material, dry-type, three-phase power transformer. * Without enclosure (only windings with a magnetic circuit assembly). The transformer is intended for installation inside the enclosure of the existing transformer. Dimensions of the available space inside this enclosure are as follows: 2,640 × 1,900 × 2,480 mm (length × width × height). * IP00 design for indoor installation, with cast insulation of at least class F (155 °C). * Connection diagram and group: D/Yₙ-11, short-circuit voltage Uₖ = 6 %. * The neutral point of the LV winding will be grounded through a resistor (NGR). * OLTC (On-Load Tap Changer) adjustment: ±2 × 2.5 %. * With natural air cooling, equipped with 3 × Pt-100 sensors for the windings and magnetic circuit. * 6.3 kV cable input – from the top. * 0.4 kV busbar output – from the side, LV busbar material – copper. * Mandatory requirement: the LV transformer busbar terminals must be connected to the 0.4 kV switchgear busbars using flexible copper braided conductors. * The cost of commissioning works with a mine site visit shall be specified as a separate line item. * Design diagrams and drawings are provided in the **Appendices**.   Additional information will be provided upon the Supplier’s request. |
| 3 | Delivery Location | * 9 Naryn highway, Balykchy, Kyrgyz Republic. * Kumtor Mine, Jeti-Oguz district, Issyk-Kul region, Kyrgyz Republic. |
| 4 | Delivery deadline | * Delivery terms shall be specified in the Agreement. * Mandatory standard factory tests. * Commissioning works shall be conducted by the Equipment Supplier or the Manufacturer's Authorized Service Representative at the Client’s site (Kumtor Mine, over 4,000 meters above sea level), with subsequent completion of all required documentation:     - electrical test report.  - commissioning certificate.  - list of observations and deadlines for corrective measures.  - and others, if required. |
| 5 | Requirements for the submission of technical and related documentation to the Client upon completion and delivery of the work | The Supplier shall provide the Client with:   * transformer passport, design documentation - specification of materials, drawings and diagrams. * operating instructions. * manufacturer's test reports. * certificates of conformity. * metal factory nameplate. |
| 6 | Warranty obligations | * According to the manufacturer's terms and conditions. * Warranty period shall be at least 24 months from the date of delivery, including repair of factory defects at the Supplier's expense. |